

0590  
08/4 CRF Errors Corrected by the STIC Systems Branch

Serial Number: 45/09/918187

CRF Processing Date: 10/05/2001  
Edited by: nut  
Verified by: \_\_\_\_\_ (STIC sta: \_\_\_\_\_)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line. #2
- ☐ Edited a format error in the Current Application Data section, specifically: **ENTERED**
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

OIPE

#2

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/918,187

DATE: 10/05/2001

TIME: 09:20:17

Input Set : A:\PTO.MH.txt

Output Set: N:\CRF3\10052001\I918187.raw

6 <110> APPLICANT: Rosanne M. Crooke  
 7 Mark J. Graham  
 10 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION  
 12 <130> FILE REFERENCE: ISPH-0590  
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/918,187  
 C--> 14 <141> CURRENT FILING DATE: 2001-07-30  
 14 <160> NUMBER OF SEQ ID NOS: 80  
 16 <210> SEQ ID NO: 1  
 17 <211> LENGTH: 20  
 18 <212> TYPE: DNA  
 19 <213> ORGANISM: Artificial Sequence  
 21 <220> FEATURE:  
 22 <223> OTHER INFORMATION: Antisense Oligonucleotide  
 24 <400> SEQUENCE: 1  
 25 tccgtcatcg ctcctcaggg 20  
 27 <210> SEQ ID NO: 2  
 28 <211> LENGTH: 20  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Artificial Sequence  
 32 <220> FEATURE:  
 33 <223> OTHER INFORMATION: Antisense Oligonucleotide  
 35 <400> SEQUENCE: 2  
 36 atgcattctg cccccaagga 20  
 38 <210> SEQ ID NO: 3  
 39 <211> LENGTH: 5221  
 40 <212> TYPE: DNA  
 41 <213> ORGANISM: Homo sapiens  
 43 <220> FEATURE:  
 44 <221> NAME/KEY: CDS  
 45 <222> LOCATION: (236)...(1315)  
 47 <400> SEQUENCE: 3  
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 49 ttcccggctc ggggacctcc acgcaccgcg gctagcgccg acaaccagct agcgtgcaag 120  
 50 gcgcgcggcg tcagcgcgta ccggcgggct tcgaaaccgc agtcctccgg cgaccccgaa 180  
 51 ctccgctccg gagcctcagc cccctggaaa gtgatcccg catccgagag ccaag atg 238  
 52 Met  
 53 1  
 55 ccg gcc cac ttg ctg cag gac gat atc tct agc tcc tat acc acc acc 286  
 56 Pro Ala His Leu Leu Gln Asp Asp Ile Ser Ser Ser Tyr Thr Thr  
 57 5 10 15  
 59 acc acc att aca gcg cct ccc tcc agg gtc ctg cag aat gga gga gat 334  
 60 Thr Thr Ile Thr Ala Pro Pro Ser Arg Val Leu Gln Asn Gly Gly Asp  
 61 20 25 30  
 63 aag ttg gag acg atg ccc ctc tac ttg gaa gac gac att cgc cct gat 382  
 64 Lys Leu Glu Thr Met Pro Leu Tyr Leu Glu Asp Asp Ile Arg Pro Asp  
 65 35 40 45  
 67 ata aaa gat gat ata tat gac ccc acc tac aag gat aag gaa ggc cca 430

ENTERED

## RAW SEQUENCE LISTING

DATE: 10/05/2001

PATENT APPLICATION: US/09/918,187

TIME: 09:20:17

Input Set : A:\PTO.MH.txt

Output Set: N:\CRF3\10052001\I918187.raw

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68 Ile Lys Asp Asp Ile Tyr Asp Pro Thr Tyr Lys Asp Lys Glu Gly Pro
69 50 55 60 65
71 agc ccc aag gtt gaa tat gtc tgg aga aac atc atc ctt atg tct ctg 478
72 Ser Pro Lys Val Glu Tyr Val Trp Arg Asn Ile Ile Leu Met Ser Leu
73 70 75 80
75 cta cac ttg gga gcc ctg tat ggg atc act ttg att cct acc tgc aag 526
76 Leu His Leu Gly Ala Leu Tyr Gly Ile Thr Leu Ile Pro Thr Cys Lys
77 85 90 95
79 ttc tac acc tgg ctt tgg ggg gta ttc tac tat ttt gtc agt gcc ctg 574
80 Phe Tyr Thr Trp Leu Trp Gly Val Phe Tyr Tyr Phe Val Ser Ala Leu
81 100 105 110
83 ggc ata aca gca gga gct cat cgt ctg tgg agc cac cgc tct tac aaa 622
84 Gly Ile Thr Ala Gly Ala His Arg Leu Trp Ser His Arg Ser Tyr Lys
85 115 120 125
87 gct cgg ctg ccc cta cgg ctc ttt ctg atc att gcc aac aca atg gca 670
88 Ala Arg Leu Pro Leu Arg Leu Phe Leu Ile Ile Ala Asn Thr Met Ala
89 130 135 140 145
91 ttc cag aat gat gtc tat gaa tgg gct cgt gac cac cgt gcc cac cac 718
92 Phe Gln Asn Asp Val Tyr Glu Trp Ala Arg Asp His Arg Ala His His
93 150 155 160
95 aag ttt tca gaa aca cat gct gat cct cat aat tcc cga cgt ggc ttt 766
96 Lys Phe Ser Glu Thr His Ala Asp Pro His Asn Ser Arg Arg Gly Phe
97 165 170 175
99 ttc ttc tct cac gtg ggt tgg ctg ctt gtg cgc aaa cac cca gct gtc 814
100 Phe Phe Ser His Val Gly Trp Leu Leu Val Arg Lys His Pro Ala Val
101 180 185 190
103 aaa gag aag ggg agt acg cta gac ttg tct gac cta gaa gct gag aaa 862
104 Lys Glu Lys Gly Ser Thr Leu Asp Leu Ser Asp Leu Glu Ala Glu Lys
105 195 200 205
107 ctg gtg atg ttc cag agg agg tac tac aaa cct ggc ttg ctg ctg atg 910
108 Leu Val Met Phe Gln Arg Arg Tyr Tyr Lys Pro Gly Leu Leu Leu Met
109 210 215 220 225
111 tgc ttc atc ctg ccc acg ctt gtg ccc tgg tat ttc tgg ggt gaa act 958
112 Cys Phe Ile Leu Pro Thr Leu Val Pro Trp Tyr Phe Trp Gly Glu Thr
113 230 235 240
115 ttt caa aac agt gtg ttc gtt gcc act ttc ttg cga tat gct gtg gtg 1006
116 Phe Gln Asn Ser Val Phe Val Ala Thr Phe Leu Arg Tyr Ala Val Val
117 245 250 255
119 ctt aat gcc acc tgg ctg gtg aac agt gct gcc cac ctc ttc gga tat 1054
120 Leu Asn Ala Thr Trp Leu Val Asn Ser Ala Ala His Leu Phe Gly Tyr
121 260 265 270
123 cgt cct tat gac aag aac att agc ccc cgg gag aat atc ctg gtt tca 1102
124 Arg Pro Tyr Asp Lys Asn Ile Ser Pro Arg Glu Asn Ile Leu Val Ser
125 275 280 285
127 ctt gga gct gtg ggt gag ggc ttc cac aac tac cac cac tcc ttt ccc 1150
128 Leu Gly Ala Val Gly Glu Gly Phe His Asn Tyr His His Ser Phe Pro
129 290 295 300 305
131 tat gac tac tct gcc agt gag tac cgc tgg cac atc aac ttc acc aca 1198
132 Tyr Asp Tyr Ser Ala Ser Glu Tyr Arg Trp His Ile Asn Phe Thr Thr

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## RAW SEQUENCE LISTING

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DATE: 10/05/2001

TIME: 09:20:17

Input Set : A:\PTO.MH.txt

Output Set: N:\CRF3\10052001\I918187.raw

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133          310          315          320
135 ttc ttc att gat tgc atg gcc gcc ctc ggt ctg gcc tat gac cgg aag 1246
136 Phe Phe Ile Asp Cys Met Ala Ala Leu Gly Leu Ala Tyr Asp Arg Lys
137          325          330          335
139 aaa gtc tcc aag gcc gcc atc ttg gcc agg att aaa aga acc gga gat 1294
140 Lys Val Ser Lys Ala Ala Ile Leu Ala Arg Ile Lys Arg Thr Gly Asp
141          340          345          350
143 gga aac tac aag agt ggc tga gtttggggtc cctcagggtt cctttttcaa 1345
144 Gly Asn Tyr Lys Ser Gly
145          355
147 aaaccagcca ggcagagggt ttaatgtctg tttattaact actgaataat gctaccagga 1405
148 tgctaaagat gatgatgtta acccattcca gtacagtatt cttttaaaat tcaaaagtat 1465
149 tgaaagccaa caactctgcc tttatgatgc taagctgata ttattttctt tcttatectc 1525
150 tctctcttct aggccattg tctctctttt cactttattg ctatcgccct cctttccctt 1585
151 attgcctccc aggcagcag ctggtcagtc tttgctcagt gtccagcttc caaagcctag 1645
152 acaacctttc tgtagcctaa aacgaatggt ctttgcctca gataactctc tttccttgag 1705
153 ctgttgtagag ctttgaagta ggtggcttga gctagagata aaacagaatc ttctgggtag 1765
154 tccctgttg attatcttca gcccaggctt ttgctagatg gaatggaaaa gcaacttcat 1825
155 ttgacacaaa gcttctaaag caggtaaatt gtcgggggag agagttagca tgtatgaatg 1885
156 taaggatgag ggaagcgaag caagaggaac ctctcgccat gatcagacat acagctgcct 1945
157 acctaatgag gacttcaagc cccaccacat agcatgcttc ctttctctcc tggctcgggg 2005
158 taaaaagtgg ctgcggtgtt tggcaatgct aattcaatgc cgcaacatat agttgaggcc 2065
159 gaggataaag aaaagacatt ttaagtttgt agtaaaagtg gtctctgctg gggaaagggt 2125
160 ttcttttctt tttttcttta ataacaagga gatttcttag ttcatatata aagaagtctt 2185
161 gaagttgggt gtttccagaa ttggtaaaaa cagcagctca tgggaatttt agtattccat 2245
162 gagctgctca ttacagttct ttctcttttc tgctctgcca tcttcaggat attggttctt 2305
163 cccctcatag taataagatg gctgtggcat ttccaaacat ccaaaaaaag ggaaggattt 2365
164 aaggaggtga agtcgggtca aaaataaaat atatatacat atatacattg cttagaacgt 2425
165 taaactatta gagtatttcc cttccaaaga gggatgtttg gaaaaaactc tgaaggagag 2485
166 gaggaattag ttgggatgcc aatttcctct ccactgctgg acatgagatg gagaggctga 2545
167 gggacaggat ctataggcag cttctaagag cgaacttcac ataggaaggg atctgagaac 2605
168 acgttgccag gggcttgaga aggttactga gtgagttatt gggagtctta ataaaaataa 2665
169 ctagatatta ggtccattca ttaattagtt ccagtttctc cttgaaatga gtaaaaacta 2725
170 gaaggcttct ctccacagtg ttgtgcccct tcactcattt ttttttgagg agaaggggt 2785
171 ctctgttaac atctagccta aagtatacaa ctgctggggg ggcagggtta ggaatctctt 2845
172 cactaccctg attcttgatt cctggctcta ccctgtctgt cccttttctt tgaccagatc 2905
173 tttctcttcc ctgaacgttt tcttctttcc ctggacaggc agcctccttt gtgtgtattc 2965
174 agaggcagtg atgacttgct gtccaggcag ctccctcctg cacacagaat gctcagggtc 3025
175 actgaaccac tgettctctt ttgaaagtag agctagctgc cactttcacg tggcctccgc 3085
176 agtgtctcca cctacacccc tgtgtctccc tgccacactg atggtctcaag acaaggctgg 3145
177 caaacctctc cagaaacatc tctgcccag aaagcctctc tctccctccc tctctcatga 3205
178 ggcacagcca agccaagcgc tcatgttgag ccagtggggc agccacagag caaaagaggg 3265
179 tttattttca gtccctctc tctgggtcag aaccagaggg catgctgaat gccccctgct 3325
180 tacttggtga ggggtccccg cctgagtcag tgctctcagc tggcagtgca atgcttgtag 3385
181 aagtaggagg aaacagttct cactgggaag aagcaagggc aagaacccaa gtgcctcacc 3445
182 tcgaaaggag gccctgttcc ctggagtcag ggtgaactgc aaagcttttg ctgagacctg 3505
183 ggatttgaga taccacaaac cctgctgaac acagtgtctg ttcagcaaac taaccagcat 3565
184 tccctacagc ctagggcaga caatagtata gaagtctgga aaaaaacaaa aacagaattt 3625
185 gagaaccttg gaccactcct gtccctgtag ctcagtcac aaagcagaag tctggctttg 3685

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## RAW SEQUENCE LISTING

DATE: 10/05/2001

PATENT APPLICATION: US/09/918,187

TIME: 09:20:17

Input Set : A:\PTO.MH.txt

Output Set: N:\CRF3\10052001\I918187.raw

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186 ctctattaag attggaaatg tacactacca aacactcagt ccactgttga gccccagtg 3745
187 tggaagggag gaaggccttt cttctgtgtt aattgcgtag aggctacagg ggtagcctg 3805
188 gactaaaggc atccttgtct tttgagctat tcacctcagt agaaaaggat ctaagggag 3865
189 atcactgtag tttagttctg ttgacctgtg cacctacccc ttggaaatgt ctgctgggtat 3925
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191 tcacttcttc ctattgtaat cgtgtgccat ggatctgata tgtaccatga ccctacataa 4045
192 ggctggatgg cacctcaggc tgagggcccc aatgtatgtg tggctgtggg tgtgggtggg 4105
193 agtgtgtctg ctgagtaagg aacacgattt tcaagattct aaagctcaat tcaagtga 4165
194 cattaatgat aaactcagat ctgatcaaga gtccggattt ctaacagtcc ctgctttggg 4225
195 ggggtgtctg acaacttagc tcaggtgcct tacatctttt ctaatcacag tgttgcatat 4285
196 gagcctgccc tcactccctc tgcagaatcc ctttgacact gagaccctac tgaagtggct 4345
197 ggtagaaaaa ggggcctgag tggaggatta tcagtatcac gatttgcagg attcccttct 4405
198 gggcttcatt ctggaaactt ttgttagggc tgcttttctt aagtgccac atttgatgga 4465
199 gggtggaat aatttgaatg tatttgattt ataagttttt tttttttttt gggttaaaag 4525
200 atggtttagt catttaaaat ggaaaatttt ctcttgggtt tgctagtatc ttgggtgtat 4585
201 tctctgtaag ttagctcaa ataggtcatc atgaaagggt aaaaaagcga ggtggccatg 4645
202 ttatgtggtt ggtaaggcc agggcctctc caaccactgt gccactgact tgctgtgtga 4705
203 ccctgggcaa gtcacttaac tataagggtgc ctgagttttc cttctgttaa aatggggata 4765
204 ataatactga cctacctcaa agggcagttt tgaggcatga ctaatgcttt ttagaaagca 4825
205 ttttgggatc cttcagcaca ggaattctca agacctgagt attttttata ataggaatgt 4885
206 ccaccatgaa cttgatacgt ccgtgtgtcc cagatgctgt cattagtcta tatggttctc 4945
207 caagaaactg aatgaatcca ttggagaagc ggtggataac tagccagaca aaatttgaga 5005
208 atacataaac aacgcattgc cacggaaaca tacagaggat gccttttctg tgattgggtg 5065
209 ggattttttc cctttttatg tgggatatag tagttacttg tgacaaaaat aattttggaa 5125
210 taattttctat taatatcaac tctgaagcta attgtactaa tctgagattg tgtttgttca 5185
211 taataaaagt gaagtgaatc taaaaaaaaa aaaaaa 5221

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213 &lt;210&gt; SEQ ID NO: 4

214 &lt;211&gt; LENGTH: 17

215 &lt;212&gt; TYPE: DNA

216 &lt;213&gt; ORGANISM: Artificial Sequence

218 &lt;220&gt; FEATURE:

219 &lt;223&gt; OTHER INFORMATION: PCR Primer

221 &lt;400&gt; SEQUENCE: 4

222 gatcccgga tccgaga

17

224 &lt;210&gt; SEQ ID NO: 5

225 &lt;211&gt; LENGTH: 27

226 &lt;212&gt; TYPE: DNA

227 &lt;213&gt; ORGANISM: Artificial Sequence

229 &lt;220&gt; FEATURE:

230 &lt;223&gt; OTHER INFORMATION: PCR Primer

232 &lt;400&gt; SEQUENCE: 5

233 ggtataggag ctgagatat cgtcctg

27

235 &lt;210&gt; SEQ ID NO: 6

236 &lt;211&gt; LENGTH: 21

237 &lt;212&gt; TYPE: DNA

238 &lt;213&gt; ORGANISM: Artificial Sequence

240 &lt;220&gt; FEATURE:

241 &lt;223&gt; OTHER INFORMATION: PCR Probe

243 &lt;400&gt; SEQUENCE: 6

RAW SEQUENCE LISTING                      DATE: 10/05/2001  
 PATENT APPLICATION: US/09/918,187              TIME: 09:20:17

Input Set : A:\PTO.MH.txt  
 Output Set: N:\CRF3\10052001\I918187.raw

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244 ccaagatgcc ggcccacttg c                               21
246 <210> SEQ ID NO: 7
247 <211> LENGTH: 19
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: PCR Primer
254 <400> SEQUENCE: 7
255 gaaggtgaag gtcggagtc                               19
257 <210> SEQ ID NO: 8
258 <211> LENGTH: 20
259 <212> TYPE: DNA
260 <213> ORGANISM: Artificial Sequence
262 <220> FEATURE:
263 <223> OTHER INFORMATION: PCR Primer
265 <400> SEQUENCE: 8
266 gaagatggtg atgggatttc                               20
268 <210> SEQ ID NO: 9
269 <211> LENGTH: 20
270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: PCR Probe
276 <400> SEQUENCE: 9
277 caagcttccc gttctcagcc                               20
279 <210> SEQ ID NO: 10
280 <211> LENGTH: 20
281 <212> TYPE: DNA
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: Antisense Oligonucleotide
287 <400> SEQUENCE: 10
288 gtccggtatt tcctcagccc                               20
290 <210> SEQ ID NO: 11
291 <211> LENGTH: 20
292 <212> TYPE: DNA
293 <213> ORGANISM: Artificial Sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Antisense Oligonucleotide
298 <400> SEQUENCE: 11
299 ccgcggtgcg tggaggtccc                               20
301 <210> SEQ ID NO: 12
302 <211> LENGTH: 20
303 <212> TYPE: DNA
304 <213> ORGANISM: Artificial Sequence
306 <220> FEATURE:
307 <223> OTHER INFORMATION: Antisense Oligonucleotide
309 <400> SEQUENCE: 12
310 tacgcgctga gccgcggcgc                               20

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/918,187

DATE: 10/05/2001

TIME: 09:20:18

Input Set : A:\PTO.MH.txt

Output Set: N:\CRF3\10052001\I918187.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/918,187

DATE: 08/08/2001

TIME: 11:03:40

Input Set : A:\ISPH-590\_Seq\_ASCII.txt

Output Set: N:\CRF3\08082001\I918187.raw

6 <110> APPLICANT: Rosanne M. Crooke  
7 Mark J. Graham  
10 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION  
12 <130> FILE REFERENCE: ISPH-0590  
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/918,187  
C--> 14 <141> CURRENT FILING DATE: 2001-07-30  
14 <160> NUMBER OF SEQ ID NOS: 80

## ERRORED SEQUENCES

1049 <210> SEQ ID NO: 80  
1050 <211> LENGTH: 20  
1051 <212> TYPE: DNA  
1052 <213> ORGANISM: Artificial Sequence ✓  
1054 <220> FEATURE:  
1055 <223> OTHER INFORMATION: Antisense Oligonucleotide ✓  
1057 <400> SEQUENCE: 80  
1058 aactactata tccacataa

20

E--&gt; 1062 16

E--&gt; 1065 19

*End of file erroneous notes*



VERIFICATION SUMMARY

PATENT APPLICATION: US/09/918,187

DATE: 08/08/2001

TIME: 11:03:41

Input Set : A:\ISPH-590\_Seq\_ASCII.txt

Output Set: N:\CRF3\08082001\I918187.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1062 M:254 E: No. of Bases conflict, LENGTH:Input:16 Counted:20 SEQ:80

M:254 Repeated in SeqNo=80